

Chapter 18: Hazardous Waste Sites

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18.1 Introduction

This chapter lists sites near the proposed alternatives that could potentially contain hazardous waste. This chapter also analyzes the effects of the proposed alternatives on these potentially hazardous sites. For sites that are near an alternative but not directly affected by the alternative footprint, this chapter analyzes the sites with the greatest potential to affect highway construction.

Hazardous Waste Sites Impact Analysis Area. The hazardous waste sites impact analysis area encompasses the area within 0.5 mile of the proposed alternatives. The hazardous waste sites within this 0.5-mile area were evaluated because project construction could encounter soil or groundwater contamination from hazardous waste sites that are up to 0.5 mile from the alternatives.

18.2 Regulatory Setting

Hazardous waste sites are regulated by the Resource Conservation and Recovery Act (RCRA), the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), and by Utah Administrative Code Title 19 (Environmental Quality Code).

The following concerns are raised when a transportation project could affect hazardous waste sites:

- The spread of existing soil or groundwater contamination through road-construction activities
- Potential for increased construction costs
- Potential for construction delays
- Construction worker health and safety
- The short-term and long-term liability associated with acquiring environmentally distressed properties

This chapter provides a preliminary identification of known parcels that contain hazardous waste sites. During the final design phase for the project and before any property is acquired, assessments would be conducted on sites of concern to determine the presence of contamination and establish the exact nature and limits of the chemical hazard. See Section 18.4.5, Mitigation Measures, for more information.

18.3 Affected Environment

18.3.1 Resource Identification Methods

To determine the presence of potential hazardous waste sites in the hazardous waste sites impact analysis area, pertinent private and public databases were reviewed. Environmental Data Resources (EDR) is a private company that supplies environmental information stored in government records. EDR conducted a search of environmental databases for sites with known contamination and sites that are regulated according to the requirements of state or federal laws. The following is a list of environmental databases that EDR reviewed during its search:

- Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS), a database of Superfund sites; also included are CERCLIS sites with no further remedial actions planned (CERCLIS-NFRAP) and the National Priorities List (NPL), which is a list of priority CERCLIS sites
- Emergency Response Notification System (ERNS)
- Facility Index System (FINDS), a comprehensive database containing site descriptions and references to other databases with more information

- FIFRA/TSCA Tracking System (FTTS), a database created to register companies that handle toxic chemicals under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) and Toxic Substances Control Act (TSCA)
- Solid Waste Landfills (SWLF) database
- Mines (MINES) database
- Resource Conservation and Recovery Information System (RCRIS), Large-Quantity Generators (RCRIS-LQG), Small-Quantity Generators (RCRIS-SQG), and Treatment, Storage, or Disposal Facilities (RCRIS-TSDF)
- Aboveground storage tanks (AST)
- Leaking underground storage tanks (LUST), both open (under investigation) and closed (no additional remedial actions are required or ever took place)
- Underground storage tanks (UST)
- Voluntary Cleanup Program (VCP)
- Polychlorinated Biphenyl Activity Database System (PADS)
- Toxics Release Inventory (TRI) System

The list of potentially hazardous sites identified through EDR's database search was supplemented by a review of the Utah Division of Environmental Response and Remediation (DERR) Interactive Map. The Interactive Map was reviewed to identify additional sites in the impact analysis area that were not recorded in the databases listed above. Site information was obtained from the DERR Interactive Map viewer (DERR 2006) and the U.S. Environmental Protection Agency's (EPA) Envirofacts Warehouse (EPA 2006), among other sources.

18.3.2 Salt Lake County

The potentially hazardous sites within 0.5 mile of the alternatives in the Salt Lake County portion of the impact analysis area are listed in Table 18.3-1 and shown in Figure 18-1 through Figure 18-5, Potentially Hazardous Sites. The database search described in Section 18.3.1, Resource Identification Methods, identified about 142 potentially hazardous sites in this portion of the impact analysis area. Some sites are listed in multiple databases.

Table 18.3-1. Hazardous Waste Sites within 0.5 Mile of the Alternatives in Salt Lake County

Database	Occurrences ^a
CERCLIS	5
ERNS	5
FINDS	42
FTTS	0
SWLF	0
RCRIS-LQG	3
RCRIS-SQG	40
RCRIS-TSDF	0
AST	0
MINES	0
LUST	20
UST	26
VCP	1
PADS	0
TRI	0
Total	142

^a A site can be listed in multiple databases.

18.3.3 Utah County

The potentially hazardous sites within 0.5 mile of the alternatives in the Utah County portion of the impact analysis area are listed in Table 18.3-2 and shown in Figure 18-6 through Figure 18-8, Potentially Hazardous Sites. The database search described in Section 18.3.1, Resource Identification Methods, identified 21 potentially hazardous sites in this portion of the impact analysis area. Some sites are listed in multiple databases.

Table 18.3-2. Hazardous Waste Sites within 0.5 Mile of the Alternatives in Utah County

Database	Occurrences ^a
CERCLIS	0
ERNS	0
FINDS	10
FTTS	0
SWLF	0
RCRIS-LQG	0
RCRIS-SQG	1
RCRIS-TSDF	0
AST	0
LUST	6
UST	4
VCP	0
MINES	0
PADS	0
TRI	0
Total	21

^a A site can be listed in multiple databases.

18.4 Environmental Consequences

18.4.1 Methodology

Hazardous waste–related sites and facilities were screened to identify those that have a higher probability of containing contaminated soil or groundwater and those that are located closer to the proposed alternatives. The sites that meet both of these criteria have the potential to affect or be affected by the proposed alternatives. These sites are listed in this section as sites of greatest concern. Also listed are sites of secondary concern and additional sites of concern. The screening process involved the following two steps:

- Identifying the type of site (database listing) and its current status
- Comparing the site’s location to that of the proposed alternatives

18.4.1.1 Site Type

To determine whether a site should be listed as a site of greatest concern, the site types listed in Section 18.3.1, Resource Identification Methods, were grouped according to their probability of existing soil or groundwater contamination.

High Probability of Contamination. The following sites typically have a higher probability of soil or groundwater contamination:

- CERCLA sites
- NPL sites
- Open LUST sites

These types of sites typically have had known releases of a large quantity of hazardous chemicals. Open LUST sites could have had either a large or small release of petroleum products, since even relatively small leaks can require a LUST action. The status of these types of sites should be re-evaluated at the time of construction to determine the nature and extent of contamination, if any, and the potential effects on construction.

Moderate Probability of Contamination. The following sites have a moderate probability of contamination:

- Closed LUST sites
- Active or closed landfills
- RCRIS-TSDF sites
- MINES sites
- Active UST sites
- TRI System sites

Closed LUST sites can have residual contamination, or contamination might have been left in place if it did not pose a threat to human health or the environment and was allowed under applicable regulations. If the site is disturbed again, additional remediation could be required. Solid-waste landfills can be a source of soil and groundwater contamination and landfill gas. Constructing a roadway over a landfill could require removing buried waste to avoid future liability and to ensure the stability of the roadway.

RCRIS-TSDF sites are those that treat, store, or dispose of hazardous wastes, although these sites have not necessarily had releases of contaminants. Contamination also might be present at sites with historic mining or processing operations. Active UST sites are regulated by DERR. They are likely to have leak-detection measures in place, but typically have not been thoroughly investigated for petroleum releases. TRI sites are required to monitor and report the toxic chemicals used, manufactured, treated, transported, or released into the environment (land or water). The status of these types of sites should be re-evaluated at the time of construction to determine the nature and extent of contamination, if any, and the potential effects on construction.

Low Probability of Contamination. The following sites have a relatively low probability of contamination:

- RCRIS small-quantity and large-quantity waste generators (SQG and LQG)
- ERNS hazardous material spill sites
- Removed and closed USTs
- Registered AST sites
- FTTS sites

RCRIS waste generators produce hazardous wastes, but the presence of a RCRIS generator does not imply an uncontrolled release of hazardous materials. However, small quantities of hazardous materials could be stored on site. In the case of documented releases of hazardous materials at ERNS sites, such releases were likely remediated adequately when they occurred or shortly afterward. Removed or closed USTs typically indicate a site that has been remediated or did not require remediation when the UST was removed from the ground or closed. The closed status means that the tank is no longer storing material. Leaking ASTs are easily detected compared to LUSTs, so they are usually repaired before a large release occurs. A large-quantity release at an FTTS site would show up in a separate database, mostly likely RCRIS or CERCLIS.

18.4.1.2 Site Location

The second criterion for determining the sites of greatest concern involved analyzing each site's location relative to the project alternatives. Table 18.3-1, Hazardous Waste Sites within 0.5 Mile of the Alternatives in Salt Lake County, and Table 18.3-2, Hazardous Waste Sites within 0.5 Mile of the Alternatives in Utah County, above list the total number of sites in each database that are within 0.5 mile of the proposed alternatives in Salt Lake and Utah Counties. Sites with a property boundary that is within about 1,000 feet of the alternatives were examined in greater detail.

Sites of greatest concern are sites with a high probability of contamination whose property boundaries are within the proposed right-of-way of the alternatives. Sites of secondary concern are sites with a high to moderate probability of contamination that are outside, but near (within 1,000 feet to 0.5 mile depending on the site type), the right-of-way for the alternatives. Additional sites of concern are sites with a low probability of contamination whose property boundaries are within the right-of-way for the alternatives. The inferred direction of groundwater flow was also considered in the evaluation.

Because of the large number of sites identified, this chapter describes the current site conditions (name, regulatory status, and nature of contamination, if known to be present) for only the sites of greatest concern (those that pose the greatest threat to construction).

18.4.2 No-Action Alternative

Under the No-Action Alternative, the Mountain View Corridor (MVC) project would not be constructed, so no impacts to hazardous waste sites would occur as a result of the MVC project. Under the No-Action Alternative, growth in the MVC study area is expected to occur at a pace similar to that under the action alternatives. The current zoning allows residential, commercial, and industrial uses, which suggests that future development in the MVC study area will be diverse.

Hazardous waste sites typically are associated with industrial and commercial facilities. Therefore, future development in the MVC study area could create additional hazardous waste sites. However, the regulatory climate for hazardous material users and waste generators discourages them from allowing uncontrolled releases of hazardous waste.

Because the MVC study area is already largely developed and because of the current regulatory climate, it is expected that the rate of creation of new hazardous waste sites will be lower in the future than it has been in the past. In



addition, existing hazardous waste sites will continue to be remediated. The net effect would be a long-term reduction in the number of hazardous waste sites in the MVC study area over the next 25 years. However, it is likely the number would never reach zero.

18.4.3 Salt Lake County Alternatives

In Salt Lake County, two roadway alternatives and a transit alternative which would be implemented as part of the roadway alternatives are under consideration: the 5600 West Transit Alternative, the 5800 West Freeway Alternative, and the 7200 West Freeway Alternative. Under the 5600 West Transit Alternative, there is a dedicated right-of-way option and a mixed-traffic option. In addition, a tolling option was considered for each freeway alternative. Impacts under each alternative and combination of alternatives and options are discussed in the following sections.

18.4.3.1 5600 West Transit Alternative

As described in Chapter 2, Alternatives, two transit options are under consideration along 5600 West in Salt Lake County. One option, the Dedicated Right-of-Way Option, would incorporate a transit system running down the center of the roadway, and the other, the Mixed-Traffic Option, would incorporate a transit system running alongside the roadway. The following sections describe the impacts from and to potentially hazardous sites under each transit option.

5600 West Transit Alternative Impacts		
Potentially Hazardous Waste Sites	Dedicated Right-of-Way Option	Mixed-Traffic Option
Sites of greatest concern within right-of-way	11	7
Additional sites of concern within right-of-way	13	13
Sites of secondary concern	15	19

5600 West Transit Alternative with Dedicated Right-of-Way Transit Option

As shown in Table 18.4-1 on page 18-12 and Figure 18-1 through Figure 18-5, Potentially Hazardous Sites, the 5600 West Transit Alternative with Dedicated Right-of-Way Transit Option would affect 11 sites of greatest concern. These sites are described below. Thirteen additional potentially hazardous sites are within the proposed right-of-way of this transit option. Fifteen sites of secondary concern are located outside the right-of-way and could affect construction if contamination is present and is migrating off site.



Sites of Greatest Concern

North Temple Landfill (CERCLIS, 1000406846). This former landfill, which is also listed as UTD000463489, extends from about 5600 West to 7200 West and is north of North Temple Street, which is the northern frontage road of Interstate 80 (I-80). The Dedicated Right-of-Way Transit Option runs along 6000 West and could affect this site. The landfill also includes the Bonneville Center site, a commercial development, which was voluntarily cleaned up by the site owners. The Bonneville Center site received a closed certification in 2000. The types of known groundwater contamination include arsenic and vinyl chloride (Rees 2005).

Pioneer Landfill (CERCLIS, UTD980952816). The site is located at 1300 South between 4800 West and 5600 West. No information on the nature or extent of contamination is noted in the EPA Envirofacts database. If solid waste or groundwater contamination is present at this site, it could be encountered during construction of the transit station at 1300 South.

Hugo's Auto Salvage (CERCLIS, 1003877606). This site is located at about 5600 West 2300 South. The privately owned auto salvage operation reportedly received slag waste products from Star Brass Foundry and Eimco that could have contained heavy metals. Several other salvage yards are present in this area. If heavy metals or other pollutants are present in soil or groundwater at the site, they could be encountered during construction.

Conoco #44010 (UST, 1005794799). The site is also referred to as Phillips #2706605. The site address is 5595 West 3500 South. The property has three 10,000-gallon gasoline tanks that are currently in use. If petroleum-based contamination is present in soil or groundwater, it could be encountered during construction.

7-Eleven #1851-22568 (LUST, U003150883). This site, located at 4098 South 5600 West, is a closed LUST site. Three tanks were removed from the ground between 1992 and 1996. The Dedicated Right-of-Way Transit Option would take a portion of this property. If petroleum-based contamination is still present in soil or groundwater at this site, it could be encountered during construction.

Tesoro #62115 (UST, 1005793708). Formerly known as Rainbo #34, this site is located at 4110 South 5600 West. The property has three 10,000-gallon gasoline tanks that are currently in use. If petroleum-based contamination is present in soil or groundwater, it could be encountered during construction.

Smith's Conoco #147 (UST, U003750670). The Dedicated Right-of-Way Transit Option would take a portion of this property, which is located at 5620 West 4100 South. The site has two 15,000-gallon USTs that were installed in October 2000

and have leak detection installed. If petroleum-based contamination is present in soil or groundwater, it could be encountered during construction.

Pipe and Tube Incorporated (LUST, 1005793694 and U003149496). The site is located at 5575 West 4700 South. Two 7,500-gallon tanks were removed from the ground in 1998. If petroleum-based contamination is still present in soil or groundwater at this site, it could be encountered during construction.

Holiday Oil #6 (UST, 1005794533). The site, which is located at 5408 South 5600 West, has two 12,000-gallon gasoline USTs, which were installed in 1993, and one 6,000-gallon diesel UST, which was installed in February 2000. All three tanks have leak detection installed. If petroleum-based contamination is present in soil or groundwater, it could be encountered during construction.

Salt Lake County Welby Pit (LUST, U000559412). This site is located at about 5600 West 9000 South. This site has two tanks that are permanently out of use, and the two LUST actions for these tanks were closed in February 2003 and August 2004. If petroleum-based contamination is still present in soil or groundwater at this site, it could be encountered during construction.

Butterfield Creek–Herriman Residential (CERCLIS, UT0002055176). Mining wastes from mines in Butterfield Canyon were washed down Butterfield Creek, and the creek water was used for irrigation. This might have contaminated soils in and around Herriman. The Dedicated Right-of-Way Transit Option would cross Butterfield Creek, and contaminated soils could be encountered during construction.

In addition, the Dedicated Right-of-Way Transit Option would affect an industrial area north of the Old Bingham Highway along Hawley Park Road in South Jordan. Several of the properties in this area are listed in Table 18.4-1 below as sites of concern outside the right-of-way. However, the high concentration of industrial sites in this area increases the potential to encounter contamination during construction. The potential to encounter contamination would be better quantified through additional site investigations conducted before construction.

Table 18.4-1 and Figure 18-1 through Figure 18-5, Potentially Hazardous Sites, show the potential hazardous waste site impacts under the Dedicated Right-of-Way Transit Option.

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Table 18.4-1. Potential Hazardous Waste Site Impacts under the 5600 West Transit Alternative with Dedicated Right-of-Way Transit Option

Site Name	Unique ID	Database	Approximate Address
<i>Sites of Greatest Concern within Right-of-Way</i>			
North Temple Landfill (Bonneville Center)	1000406846	CERCLIS	North Temple St., 5600 West to 7200 West
Pioneer Landfill	UTD980952816	CERCLIS	1300 South, 4800 West to 5600 West
Hugo's Auto Salvage	1003877606	CERCLIS-NFRAP	5600 West 2300 South
Conoco #44010	1005794799	UST	5595 West 3500 South
7-Eleven #1851-22568	U003150883	LUST	4098 South 5600 West
Tesoro #62115 (Rainbo #34)	1005793708	UST	4110 South 5600 West
Smith's Conoco #147	U003750670	UST	5620 West 4100 South
Pipe and Tube Incorporated	1005793694	LUST	5575 West 4700 South
Holiday Oil #6	1005794533	UST	5408 South 5600 West
Salt Lake County Welby Pit	U000559412	LUST	5600 West 9000 South
Butterfield Creek–Herriman Residential	UT0002055176	CERCLIS	Herriman
<i>Sites of Secondary Concern outside Right-of-Way</i>			
General Distributing Company	U003765022	UST	5350 W. Amelia Earhart Dr.
Salt Lake City Fire Department #9	U000813456	LUST	5822 W. Amelia Earhart Dr.
Southland Foods Center	U000813461	UST	5850 W. Amelia Earhart Dr.
Skagg's Alpha Beta	1000234631	UST	5201 W. Amelia Earhart Dr.
Roy's 66 (Kick's 66)	UDEQ 4002210	UST	5505 W. Amelia Earhart Dr.
Salt Lake County Fire Station #57	U000813394	LUST	6305 South 5600 West
Maverik #218	DEQ 4001541	UST	5390 South 5600 West
7-Eleven #1851-21132	U003150932	LUST	5635 West 3500 South
All State Drums	UTD988076147	CERCLIS	5280 W. Old Bingham Hwy.
Fassio Egg Farm	C005	VCP	300 North about 400 East (Herriman)
Sebright West, Inc. dba S.W.I.	U003150857	LUST	5617 W. Wells Park Rd. (9500 South)
Hunter High School	U003150963	UST	4200 South 5600 West
(Old) Moulton Excavating Inc.	U003229703	UST	5555 W. Leo Park Rd. (9300 South)
Fashion Cabinets	1000657345	UST	5440 West 9620 South
Speck Construction Inc.	U000559405	UST	5618 W. Axel Park Rd. (9580 South)
<i>Additional Sites of Concern within Right-of-Way</i>			
Schenkers Int'l Forwarders Inc.	1004606238	FINDS	4980 Amelia Earhart Dr.
Cargo-Link International	1004606236	FINDS	5106 Amelia Earhart Dr.
AT&T Universal Card Services	1005490097	FINDS	5201 Amelia Earhart Dr.
Davol Specialty Access Product	1000657306	RCRIS-SQG	5425 W. Amelia Earhart Dr.

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Site Name	Unique ID	Database	Approximate Address
Cardiopulmonics Inc.	1004788677	RCRIS-SQG	5060 W. Amelia Earhart Dr.
Beehive International	1000242225	RCRIS-SQG	4910 Amelia Earhart Dr.
Acme Electric Corp.	1000196544	RCRIS-SQG	5416 Amelia Earhart Dr.
Deluxe Check Printers Inc.	1000428968	RCRIS-SQG	4745 Amelia Earhart Dr.
American Pad & Paper	1001203829	RCRIS-SQG	5995 W. Amelia Earhart Dr.
Unnamed	95070989	FINDS	5066 Amelia Earhart Dr.
Payless Shoe Source #3538	1000992752	RCRIS-SQG	3460 South 5600 West
West Jordan Manufacturing Facility	1005795848	FINDS	5520 Old Bingham Hwy.
Aggreko Incorporated	1005795477	FINDS	5591 W. Leo Park Rd.

ID = identifier
dba = doing business as

5600 West Transit Alternative with Mixed-Traffic Transit Option

The impacts from and to potentially hazardous sites under the Mixed-Traffic Transit Option would be similar to the impacts under the Dedicated Right-of-Way Transit Option. The Mixed-Traffic Transit Option would affect seven sites of greatest concern compared to 11 for the Dedicated Right-of-Way Transit Option. Of the sites of greatest concern identified above in Table 18.4-1, the North Temple Landfill, 7-Eleven #1851-22568, Tesoro #62115, and Smith's Conoco #147 properties are outside the proposed right-of-way for this transit option. However, these sites are in close proximity and they are listed as sites of secondary concern outside the right-of-way for the Mixed-Traffic Transit Option. Thirteen additional potentially hazardous sites are within the proposed right-of-way of this transit option and are listed as additional sites of concern. Nineteen sites of secondary concern are located near this alternative and could affect construction if contamination is present.

Table 18.4-2 below shows the potential hazardous waste site impacts under the Mixed-Traffic Transit Option. Descriptions of the sites of greatest concern are found in the section above for the Dedicated Right-of-Way Transit Option.

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Table 18.4-2. Potential Hazardous Waste Site Impacts under the 5600 West Transit Alternative with Mixed-Traffic Transit Option

Site Name	Unique ID	Database	Approximate Address
<i>Sites of Greatest Concern within Right-of-Way</i>			
Pioneer Landfill	UTD980952816	CERCLIS	1300 South, 4800 West to 5600 West
Hugo's Auto Salvage	1003877606	CERCLIS-NFRAP	5600 West 2300 South
Conoco #44010	1005794799	UST	5595 West 3500 South
Pipe and Tube Incorporated	1005793694	LUST	5575 West 4700 South
Holiday Oil #6	1005794533	UST	5408 South 5600 West
Salt Lake County Welby Pit	U000559412	LUST	5600 West 9000 South
Butterfield Creek–Herriman Residential	UT0002055176	CERCLIS	Herriman
<i>Sites of Secondary Concern outside Right-of-Way</i>			
7-Eleven #1851-22568	U003150883	LUST	4098 South 5600 West
Tesoro #62115 (Rainbo #34)	1005793708	UST	4110 South 5600 West
Smith's Conoco #147	U003750670	UST	5620 West 4100 South
Salt Lake City Fire Department #9	U000813456	LUST	5822 W. Amelia Earhart Dr.
General Distributing Company	U003765022	UST	5350 W. Amelia Earhart Dr.
North Temple Landfill (Bonneville Center)	UTD000463489	CERCLIS	North Temple St., 5600 West to 7200 West
Southland Foods Center	U000813461	UST	5850 W. Amelia Earhart Dr.
Skagg's Alpha Beta	1000234631	UST	5201 W. Amelia Earhart Dr.
Roy's 66 (Kick's 66)	UDEQ 4002210	UST	5505 W. Amelia Earhart Dr.
S.L. County Fire Station #57	U000813394	LUST	6305 South 5600 West
Maverik #218	UDEQ 4001541	UST	5390 South 5600 West
7-Eleven #1851-21132	U003150932	LUST	5635 West 3500 South
All State Drums	UTD988076147	CERCLIS	5280 W. Old Bingham Hwy.
Fassio Egg Farm	C005	VCP	300 North about 400 East (Herriman)
Sebright West Inc. dba S.W.I.	U003150857	LUST	5617 W. Wells Park Rd. (9500 South)
Hunter High School	U003150963	UST	5600 West 4200 South
(Old) Moulton Excavating Inc.	U003229703	UST	5555 W. Leo Park Rd. (9300 South)
Fashion Cabinets	1000657345	UST	5440 West 9620 South
Speck Construction Inc.	U000559405	UST	5618 W. Axel Park Rd. (9580 South)
<i>Additional Sites of Concern within Right-of-Way</i>			
Schenkers Int'l Forwarders Inc.	1004606238	FINDS	4980 Amelia Earhart Dr.
Cargo-Link International	1004606236	FINDS	5106 Amelia Earhart Dr.
AT&T Universal Card Services	1005490097	FINDS	5201 Amelia Earhart Dr.
Davol Specialty Access Product	1000657306	RCRIS-SQG	5425 W. Amelia Earhart Dr.

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Site Name	Unique ID	Database	Approximate Address
Cardiopulmonics Inc.	1004788677	RCRIS-SQG	5060 W. Amelia Earhart Dr.
Beehive International	1000242225	RCRIS-SQG	4910 Amelia Earhart Dr.
Acme Electric Corp.	1000196544	RCRIS-SQG	5416 Amelia Earhart Dr.
Deluxe Check Printers Inc.	1000428968	RCRIS-SQG	4745 Amelia Earhart Dr.
American Pad & Paper	1001203829	RCRIS-SQG	5995 W. Amelia Earhart Dr.
Unnamed	95070989	HMIRS	5066 Amelia Earhart Dr.
Payless Shoe Source #3538	1000992752	RCRIS-SQG	3460 South 5600 West
West Jordan Manufacturing Facility	1005795848	FINDS	5520 W. Old Bingham Hwy.
Aggreko Incorporated	1005795477	FINDS	5591 Leo Park Rd.

18.4.3.2 5800 West Freeway Alternative

As described in Chapter 2, Alternatives, this alternative would consist of a freeway extending from I-80 to the Utah County line.

This section describes the impacts from and to potentially hazardous sites under the 5800 West Freeway Alternative. Sites that pose the greatest threat to construction (sites of greatest concern) are described in this section. Additional sites that have a lower potential to affect construction are also identified.

5800 West Freeway Alternative Impacts	
Potentially Hazardous Waste Sites	Impacts
Sites of greatest concern within right-of-way	11
Additional sites of concern within right-of-way	12
Sites of secondary concern	6

As shown in Table 18.4-3 on page 18-19 and Figure 18-1 through Figure 18-5, Potentially Hazardous Sites, the 5800 West Freeway Alternative would affect 11 sites of greatest concern. These sites are described below. Twelve additional potentially hazardous sites are within the proposed right-of-way for this alternative and are listed as additional sites of concern. Six sites of secondary concern are located near this alternative and could affect construction if contamination is present.

Sites of Greatest Concern

North Temple Landfill (CERCLIS, 1000406846 and UTD000463489). This former landfill, which is also listed as UTD000463489, extends from about 5600 West to 7200 West and is north of North Temple Street, which is the northern frontage road of I-80. The 5800 West Alternative would take a portion of this property. The landfill also includes the Bonneville Center site, a commercial development, which was voluntarily cleaned up by the site owners. The Bonneville

Center site received a closed certification in 2000. The types of known groundwater contamination include arsenic and vinyl chloride (Rees 2005).

Lee Kay Center for Hunter Education. This property was originally the Utah Ordnance Depot. The property was declared surplus property by the War Assets Administration in 1947, and ownership was transferred to the Utah Fish and Game Commission (now the Utah Division of Wildlife Resources) in 1950. Before the transfer of ownership, the property was used as a firing range for .50-caliber tracers and .30-caliber incendiary projectiles. The U.S. Army conducted decontamination operations at the site in 1948. However, decontamination procedures and post-cleanup analytical results were not provided to the Division of Wildlife Resources (Green 2004). From 1950 to 1979, the site was known as the Remington Arms property. The site was used extensively by sporting-dog trainers, and shooting was unregulated. These combined activities may have caused high concentrations of lead above background levels in soils in the area. The Division of Wildlife Resources has stated that there is a risk of encountering hazardous materials on site (Green and Sakaguchi 2006).

Utah Department of Transportation (UDOT) Station #224 (CERCLIS, U000813740). This site, located at 5791 West 2100 South, is a closed LUST site. Two diesel fuel LUSTs and one gasoline LUST were removed from the ground between 1988 and 1997. If petroleum-based contamination is still present in soil or groundwater at this site, it could be encountered during construction.

Hugo's Auto Salvage (CERCLIS, 1003877606). This site is located at about 5600 West 2300 South. The privately owned auto salvage operation reportedly received slag waste products from Star Brass Foundry and Eimco that could have contained heavy metals. Several other salvage yards are present in this area. The required right-of-way for the 5800 West Freeway Alternative would take a large portion of the Parts Mart salvage yard. If heavy metals or other pollutants are present in soil or groundwater at the site, they could be encountered during construction.

Rocky Mountain Power Yard (UST U003150948). This site, located at 5783 West 4100 South, is a UST site. One diesel fuel UST and one gasoline UST were removed from the ground in 1983. If petroleum-based contamination is present in soil or groundwater at this site, it could be encountered during construction.

ATK Bacchus Plant (LUST, UDEQ 4000368; TRI, 84044HRCLS4950S). The area from about 4100 South to 5400 South and west of 6400 West is an area of concern for hazardous materials. Numerous sites are listed in various databases in this area. This property was owned by Hercules Aerospace until 1995, and Hercules is listed in the CERCLIS database (UT3170027277) for onsite disposal

of hazardous materials from 1961 to 1965. Alliant Tech Systems, or ATK Thiokol Propulsion/Bacchus Works, is a munitions, propulsion, composites, and explosives development and manufacturing company that purchased the northern portion of the Hercules property. Several LUST and UST listings are associated with this property under ATK's ownership. Several diesel and used-oil USTs were removed between 1988 and 2002, and several diesel-fuel USTs remain on the property. This site is described in more detail in Section 18.4.3.3, 7200 West Freeway Alternative. The 5800 West Freeway Alternative would affect this property between 4100 South and 5400 South.

Kern River/Bingham Creek Pipeline (CERCLIS, 1000483581, UTD988073458, and UTD988075008). In January 1994, EPA proposed that the Kennecott South Zone be added to the National Priorities List. This area included the Bingham Creek channel and floodplain because of the elevated lead and arsenic concentration in area soils. During the 1990s, soil sampling identified those areas that presented the highest risk for human exposure. These areas were cleaned to levels required by EPA. There could be some exposure potential associated with constructing a stream crossing over Bingham Creek (ATSDR 2006).

Kennecott Groundwater Plume (CERCLIS, UTD000826404). Also part of the Kennecott South Zone, this site is bounded on the west by the Oquirrh Mountains and on the east by about 4800 West. The northern limit is at approximately New Bingham Highway and the southern limit is at about 13400 South. Acidic water from the leaching of waste products escaped from a collection system and contaminated the groundwater under the site. A plume of contamination has spread in the groundwater. The plume begins as a solution of acidic heavy metals and sulfates. At a distance of about a mile, the acid is neutralized by the soils, and the metals begin to separate into sulfates. The contaminants cover more than 72 square miles. The 5800 West Freeway Alternative comes closest to the highest sulfate concentrations in groundwater at about 10400 South. The 5800 West Freeway Alternative is below-grade from about 10500 South to 14200 South. However, the 5800 West Freeway Alternative is not likely to encounter contamination because the groundwater is 200 feet to 300 feet deep at this location (Kennecott Strategic Resources 2002). Therefore, the potential to encounter contaminants during construction is low.

Bingham Magna Ditch. Mining wastes from mining operations in Butterfield Canyon, which is located in the southern part of Salt Lake County, were once conveyed north to the Magna area in an open canal. EPA recently discovered the Bingham Magna Ditch and is conducting an investigation to determine the responsible parties. The canal was dug in 1932 and used until 1937. Over time, sections of the canal were buried under 2 feet to 4 feet of soil. However, the open canal might still exist at the surface in some locations. Based on a map provided

by EPA that shows the approximate location, the canal runs from south to north from the Old Bingham Highway to about 7800 South. Near 7800 South, the canal runs northeast into the hazardous waste sites impact analysis area. From 7800 South, the canal turns to run north to about 4700 South, where it then turns northwest out of the hazardous waste sites impact analysis area. The section of the canal north of 7800 South is a site of greatest concern because the 5800 West Freeway Alternative would cross the canal at this location. The 5800 West Freeway Alternative would be constructed below ground in this location, which would increase the potential to encounter contaminated soils or shallow groundwater, if it exists. The 5800 West Freeway Alternative might also cross the canal near 4700 South, if the canal still exists in this location. The nature and extent of contamination in both crossing locations is not known (Bacon 2007).

Butterfield Creek–Herriman Residential (CERCLIS, UT0002055176). Mining wastes from mines in Butterfield Canyon were washed down Butterfield Creek, and the creek water was used for irrigation. This might have contaminated soils in and around Herriman. The 5800 West Freeway Alternative would cross Butterfield Creek just south of 11800 South, and contaminated soils could be encountered during construction.

Jordan Valley Water Treatment Plant (LUST, U003149453; UDEQ 400875). This site is located at about 15305 South 3200 West. Two hazardous-waste storage tanks were removed in 1991 and 1996. The exact nature of the substances stored in the tanks is not known. The material was likely a mixture of contaminants from the water treatment process consisting of organic compounds contaminated with heavy metals or other controlled substances. One diesel UST is still in use.

In addition, the 5800 West Freeway Alternative would affect an industrial area north of the Old Bingham Highway along Hawley Park Road in South Jordan. Several of the properties in this area are listed in Table 18.4-3 below as sites of concern outside the right-of-way. However, the high concentration of industrial sites in this area increases the potential to encounter contamination during construction. The potential to encounter contamination would be better quantified through additional site investigations before construction.

Table 18.4-3. Potential Hazardous Waste Site Impacts under the 5800 West Freeway Alternative

Site Name	Unique ID	Database	Approximate Address
<i>Sites of Greatest Concern within Right-of-Way</i>			
North Temple Landfill	1000406846	CERCLIS	North Temple St., 5600 West to 7200 West
Lee Kay Center for Hunter Education	NA	NA	2100 South, 5800 West to 7200 West
UDOT Station #224	U000813740	LUST	5791 West 2100 South
Hugo's Auto Salvage	1003877606	CERCLIS-NFRAP	5600 West 2300 South
Rocky Mountain Power Yard (Utah Power & Light Company)	U003150948	UST	5783 West 4100 South
ATK Bacchus Plant	4000368	LUST	6400 West, 4100 South to 5400 South
Kern River/Bingham Creek Pipeline	1000483581	CERCLIS	6200 West 10200 South
Kennecott Groundwater Plume	UTD000826404	CERCLIS	5600 West, 10400 South to 13400 South
Butterfield Creek–Herriman Residential	UT0002055176	CERCLIS	Herriman
Bingham Magna Ditch	NA	NA	7000 West 7800 South
Jordan Valley Water Treatment	U003149453	LUST	15305 South 3200 West
<i>Sites of Secondary Concern outside Right-of-Way</i>			
Salt Lake County Landfill	UTD981541055	CERCLIS	1300 South, 5600 West to 6000 West
Bay Construction	U003149685	UST	12600 South 4400 West
Rocks Travel Center	1005793459	FINDS	6381 West 2100 South
Hunter High School	U003150963	UST	5600 West 4200 South
Sebright West Inc.	U003150857	LUST	5617 W. Wells Park Rd. (9500 South)
Speck Construction Inc.	U000559405	UST	5618 W. Axel Park Rd. (9580 South)
<i>Additional Sites of Concern within Right-of-Way</i>			
Weider Nutrition International	1004788994	RCRIS-SQG	2002 South 5070 West
Wheeler Machinery Co.	1000204317	RCRIS-LQG	4901 West 2100 South
Dick Simon Trucking Inc.	1001125916	RCRIS-SQG	5175 West 2100 South
Godfrey Trucking Incorporated	1004789091	RCRIS-SQG	6173 West 2100 South
Circuit Technology Cable	1005797460	FINDS	4125 South 6000 West
Recot dba Frito-Lay	1004788862	RCRIS-SQG	6301 West 4700 South
Jack B. Parsons Company	1006086319	FINDS	5400 South 6600 West
Spill	99636926	ERNS	6475 West 5400 South
Pit #5 Salt Lake County	1005795746	FINDS	6200 West 7800 South
CCS Salt Lake City Incorporated	1005796876	FINDS	5899 Rivendell Dr.
Starfire Industries Inc.	1000357128	RCRIS-SQG	5955 W. Wells Park Rd.
Copper Hills High	1004788864	RCRIS-SQG	5600 West 7800 South

Combined Impacts of 5800 West Freeway and 5600 West Transit Alternatives

The 5800 West Freeway Alternative would be implemented with one of the two 5600 West Transit Alternative options.

5800 West Freeway Alternative with Dedicated Right-of-Way Transit Option

The combined impacts of the 5800 West Freeway Alternative and Dedicated Right-of-Way Transit Option include 22 sites of greatest concern. Twenty-five additional potentially hazardous sites are within the proposed rights-of-way. A total of 18 sites of secondary concern are near the proposed alternatives and could affect construction.

Combined Impacts of 5800 West Freeway and 5600 West Transit Alternatives		
Potentially Hazardous Waste Sites	Dedicated Right-of-Way Option	Mixed-Traffic Option
Sites of greatest concern within right-of-way	22	18
Additional sites of concern within right-of-way	25	25
Sites of secondary concern	18 ^a	22 ^a

5800 West Freeway Alternative with Mixed-Traffic Transit Option

The combined impacts of the 5800 West Freeway Alternative and Mixed-Traffic Transit Option include 18 sites of greatest concern. Twenty-five additional potentially hazardous sites are within the proposed rights-of-way. A total of 22 sites of secondary concern are near the proposed alternatives and could affect construction.

^a Three sites of secondary concern (Hunter High School, Sebright West, and Speck Construction), which are outside the right-of-way, are the same for the 5800 West Freeway Alternative and both transit alternative options and are counted only once in this table.

5800 West Freeway Alternative with Tolling Option

Under the 5800 West Freeway Alternative with Tolling Option, the overall facility design would not change compared to the non-tolled alternative, so impacts to potentially hazardous sites would be the same as those for the 5800 West Freeway Alternative.



18.4.3.3 7200 West Freeway Alternative

As described in Chapter 2, Alternatives, this alternative would consist of a freeway alignment extending from I-80 to the Utah County line.

This section describes the impacts from and to potentially hazardous sites under the 7200 West Freeway Alternative. Sites that pose the greatest threat to construction (sites of greatest concern) are described in this section. Additional sites that have a lower potential to affect construction are also identified.

7200 West Freeway Alternative Impacts	
Potentially Hazardous Waste Sites	Impacts
Sites of greatest concern within right-of-way	14
Additional sites of concern within right-of-way	11
Sites of secondary concern	5

As shown in Table 18.4-4 on page 18-24 and Figure 18-1 through Figure 18-5, Potentially Hazardous Sites, the 7200 West Freeway Alternative would affect 14 sites of greatest concern. Eleven additional potentially hazardous sites are within the proposed right-of-way for this alternative. Five sites of secondary concern are located near this alternative and could affect construction if contamination is present.

Sites of Greatest Concern

South of 5400 South, the 7200 West Freeway Alternative is on the same alignment as the 5800 West Freeway Alternative. Therefore, the impacts to the following sites would be the same for this alternative as for the 5800 West Freeway Alternative:

- Kern River/Bingham Creek Pipeline
- Kennecott Groundwater Plume
- Bingham Magna Ditch (also affected near 4700 South)
- Butterfield Creek–Herriman Residential
- Jordan Valley Water Treatment Plant

The 7200 West Freeway Alternative would also affect the following sites in the northern segment of the Salt Lake County portion of the hazardous waste sites impact analysis area:

- North Temple Landfill
- Lee Kay Center for Hunter Education

These sites are described in Section 18.4.3.2, 5800 West Freeway Alternative. Additional sites of greatest concern for the 7200 West Freeway Alternative are discussed below.



Mountain View Landfill (CERCLIS, UTD980635932). The site is located at about 1300 South 7200 West. This landfill (formerly the Blandfill) received construction and demolition debris for an unknown number of years. Hazardous waste might have been inadvertently landfilled on the property in the past. Waste might be present within the proposed right-of-way for this alternative. If waste is present, it could be unstable with respect to its ability to support roadway fill material. Any settlement could damage the roadway surface.

Kersey Creek Junk Yard (CERCLIS, UT0009933114). This CERCLIS site is located at about 2090 South 7200 West. The site is also listed in the FINDS database as King Salvage (FINDS, 1006301295). The site was under investigation in 2000. No additional information is available from EPA's Envirofacts database. Contamination could be petroleum-based or possibly chlorinated solvents from this auto salvaging operation. Other industrial sites are located in this area including a construction material recycling business and other junk yards. Several ASTs were noted during a field survey. If contamination is present in soil or groundwater, it could be encountered during construction.

7-Eleven #1851-19154 (UST, U003149522). The site has two 10,000-gallon gasoline USTs and one 6,000-gallon gasoline UST which were installed in April 1977. If petroleum-based contamination is present in soil or groundwater, it could be encountered during construction.

Mike's Chevron (UST, U003367117). According to the DERR database, the site has one 20,000-gallon UST and one 15,000-gallon gasoline UST which were installed in January 1998. The site also has one 5,000-gallon diesel UST which was installed in June 2001. If petroleum-based contamination is present in soil or groundwater, it could be encountered during construction.

Tesoro #62086 (UST, UDEQ 4001632). The site has three 12,000-gallon gasoline USTs which were installed in May 1990. If petroleum-based contamination is present in soil or groundwater, it could be encountered during construction.

Granger Bishop's Storehouse (LUST, 1004788632). This closed LUST site is located at 3648 South 7200 West. One 12,000-gallon diesel LUST and one 4,000-gallon gasoline LUST were removed from the ground in 1992. Contamination, if any, could have been left in place if it did not pose a threat to human health or the environment and could be encountered during construction.

ATK Bacchus Plant (LUST, UDEQ 4000368; TRI, 84044HRCLS4950S). The area from about 4100 South to 5400 South and west of 6400 West is an area of concern for hazardous materials. Numerous sites are listed in various databases in this area. This property was owned by Hercules Aerospace until 1995, and Hercules is listed in the CERCLIS database (UT3170027277) for onsite disposal

of hazardous materials from 1961 to 1965. Alliant Tech Systems, or ATK Thiokol Propulsion/Bacchus Works, is a munitions, propulsion, composites, and explosives development and manufacturing company that purchased the northern portion of the Hercules property. Several LUST and UST listings are associated with this property under ATK's ownership. Several diesel and used-oil USTs were removed between 1988 and 2002, and several diesel-fuel USTs remain on the property. ATK is also listed in the TRI database (84044HRCLS4950S). The TRI database lists onsite releases into soils in varying quantities (as much as 47,000 pounds) over the past 15 years. ATK used a wide range of chemicals from solvents to acids to ammonia.

Hexcel Corporation operates on another portion of the formerly Hercules-owned property. Hexcel, which is located north of 5400 South, manufactures composite materials and is listed in the TRI database (84044HRCLS6800). Although no records of onsite waste disposal or releases were noted for Hexcel in the TRI database, past operations could have resulted in onsite contamination in soil or groundwater.

In addition, the 7200 West Freeway Alternative would affect an industrial area north of the Old Bingham Highway along Hawley Park Road in South Jordan. Several of the properties in this area are listed in Table 18.4-4 below as sites of concern outside the right-of-way. However, the high concentration of industrial sites in this area increases the potential to encounter contamination during construction. The potential to encounter contamination would be better quantified through additional site investigations before construction.

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Table 18.4-4. Potential Hazardous Waste Site Impacts under the 7200 West Freeway Alternative

Site Name	Unique ID	Database	Approximate Address
<i>Sites of Greatest Concern within Right-of-Way</i>			
North Temple Landfill	1000406846	CERCLIS	North Temple St., 5600 West to 7200 West
Lee Kay Center for Hunter Education	NA	NA	2100 South, 5800 West to 7200 West
Mountain View Landfill (Blandfill)	UTD980635932	CERCLIS	2100 South 7200 West
Kersey Creek Junk Yard	UT0009933114	CERCLIS	2090 South 7200 West
7-Eleven #1851-19154	U003149522	UST	7204 West 3500 South
Mike's Chevron	U003367117	UST	7198 West 3500 South
Tesoro #62086	UDEQ 4001632	UST	7210 West 3500 South
Granger Bishop's Storehouse	1004788632	LUST	3648 South 7200 West
ATK Bacchus Plant (and Hexcel Corp.)	84044HRCLS4950S	TRI	6400 West, 4100 South to 5400 South
Kern River/Bingham Creek Pipeline	1000483581	CERCLIS	6200 West 10200 South
Kennecott Groundwater Plume	UTD000826404	CERCLIS	5600 West, 10400 South to 12600 South
Bingham Magna Ditch	NA	NA	7000 West 7800 South
Butterfield Creek–Herriman Residential	UT0002055176	CERCLIS	Herriman
Jordan Valley Water Treatment	U003149453	LUST	15305 South 3200 West
<i>Sites of Secondary Concern outside Right-of-Way</i>			
Express Oil, Inc.	U003150958	LUST	6900 West 3500 South
Sebright West Inc. dba S.W.I.	U003150857	LUST	5617 W. Wells Park Rd. (9500 South)
Speck Construction Inc.	U000559405	UST	5618 W. Axel Park Rd. (9580 South)
Bay Construction Inc.	U003149685	UST	12600 South 4400 West
Spill	99636926	ERNS	6475 West 5400 South
<i>Additional Sites of Concern within Right-of-Way</i>			
Continental Steel Corporation	1005796804	FINDS	2330 South 7200 West
Pit #5 Salt Lake County	1005795746	FINDS	6200 West 7800 South
Peterson, Randy	1006300953	FINDS	2160 South 7200 West
Norwood Transportation Inc.	1000438481	RCRIS-SQG	2232 South 7200 West
Micron Metals	1000367597	RCRIS-SQG	2450 South 7200 West
Robert W. White	1005793494	FINDS	3775 South 7200 West
Bonneville Acres Alliant	1000314468	RCRIS-SQG	4050 South 7200 West
Recot Incorporated	1004605340	FINDS	6400 West 4700 South
Jack B. Parsons Company	1006086319	FINDS	5400 South 6600 West
CCS Salt Lake City Incorporated	1005796876	FINDS	5899 Rivendell Dr.
Starfire Industries Inc.	1000357128	RCRIS-SQG	5955 W. Wells Park Rd.

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Combined Impacts of 7200 West Freeway and 5600 West Transit Alternatives

As with the 5800 West Freeway Alternative, the 7200 West Freeway Alternative would be implemented with one of the two 5600 West Transit Alternative options.

7200 West Freeway Alternative with Dedicated Right-of-Way Transit Option

The combined impacts of the 7200 West Freeway Alternative and Dedicated Right-of-Way Transit Option include 25 sites of greatest concern. Twenty-four additional potentially hazardous sites are within the proposed rights-of-way. A total of 18 sites of secondary concern are near the proposed alternatives and could affect construction.

Combined Impacts of 7200 West Freeway and 5600 West Transit Alternatives		
Potentially Hazardous Waste Sites	Dedicated Right-of-Way Option	Mixed-Traffic Option
Sites of greatest concern within right-of-way	25	21
Additional sites of concern within right-of-way	24	24
Sites of secondary concern	18 ^a	22 ^a

^a Two sites of secondary concern (Sebright West and Speck Construction), which are outside the right-of-way, are the same for the 7200 West Freeway Alternative and both transit alternative options and are counted only once in this table.

7200 West Freeway Alternative with Mixed-Traffic Transit Option

The combined impacts of the 7200 West Freeway Alternative and Mixed-Traffic Transit Option include 21 sites of greatest concern. Twenty-four additional potentially hazardous sites are within the proposed rights-of-way. A total of 22 sites of secondary concern are near the proposed alternatives and could affect construction.

7200 West Freeway Alternative with Tolling Option

Under the 7200 West Freeway Alternative with Tolling Option, the overall facility design would not change compared to the non-tolled alternative, so impacts to potentially hazardous sites would be the same as those for the 7200 West Freeway Alternative.

18.4.4 Utah County Alternatives

In Utah County, three alternatives are under consideration: the Southern Freeway Alternative, the 2100 North Freeway Alternative, and the Arterials Alternative. In addition, a tolling option was evaluated for each Utah County alternative. Impacts under each combination of alternatives and options are discussed in the following sections.

18.4.4.1 Southern Freeway Alternative

As described in Chapter 2, Alternatives, this alternative would consist of a freeway extending from the Utah County line to Interstate 15 (I-15) at Lindon.

As shown in Table 18.4-5 below and Figure 18-6, Potentially Hazardous Sites – Southern Freeway Alternative, the Southern Freeway Alternative would affect two sites of greatest concern in the proposed right-of-way. These sites are described below. Two additional potentially hazardous sites are within the proposed right-of-way for this alternative and are listed as additional sites of concern. Two sites of secondary concern are located near this alternative and could affect construction if contamination is present.

Southern Freeway Alternative Impacts	
Potentially Hazardous Waste Sites	Number of Sites
Sites of greatest concern within right-of-way	2
Additional sites of concern within right-of-way	2
Sites of secondary concern	2

Sites of Greatest Concern

Timpanogos Special Service District (LUST, U003033392). The site is located at about 6400 North 5050 West. The location of the LUST on the property is not known. The LUST occurrence was closed in April 1994 after 48 cubic feet of soil were treated. If petroleum-based contamination is still present in soil or groundwater, it could be encountered during construction.

Saratoga West Crops Project Canal Pump (LUST, U003151342). The site is located on 8400 North west of State Route (SR) 68 (Redwood Road). The location of the LUST on the property is not known. The LUST occurrence was closed in April 1995 after 128 cubic feet of soil were treated. If petroleum-based contamination is still present in soil or groundwater, it could be encountered during construction.

Table 18.4-5. Potential Hazardous Waste Site Impacts under the Southern Freeway Alternative

Site Name	Unique ID	Database	Approximate Address
<i>Sites of Greatest Concern within Right-of-Way</i>			
Timpanogos Special Service Dist.	U003033392	LUST	6400 North 5050 West
Saratoga West Crops Project Canal Pump	U003151342	LUST	0.5 mile west of Redwood Rd. along 8400 North
<i>Sites of Secondary Concern outside Right-of-Way</i>			
Walter Strate	1005796380	FINDS	6384 North 5300 West
Jordan Valley Water Treatment	U003149453	LUST	15305 South 3200 West
<i>Additional Sites of Concern within Right-of-Way</i>			
Pleasant Grove Timp Farm	1005796460	FINDS	5750 West 6400 North
Pelican Point Aggregate Plant	1005795849	FINDS	2206 S. Redwood Rd.

Southern Freeway Alternative with Tolling Option

Under the Southern Freeway Alternative with Tolling Option, the overall facility design would not change compared to the non-tolled alternative, so impacts to potentially hazardous sites would be the same as those for the Southern Freeway Alternative.

18.4.4.2 2100 North Freeway Alternative

As described in Chapter 2, Alternatives, this alternative would consist of a freeway extending from the Utah County line to SR 73 in Saratoga Springs and a lateral freeway extending east along 2100 North to I-15 in Lehi.

As shown in Table 18.4-6 below and Figure 18-7, Potentially Hazardous Sites – 2100 North Freeway Alternative, the 2100 North Freeway Alternative would affect one site of greatest concern in the right-of-way. One additional potentially hazardous site is within the proposed right-of-way. Nine sites of secondary concern are located near this alternative and could affect construction if contamination is present (one site has two separate FINDS entries).

2100 North Freeway Alternative Impacts	
Potentially Hazardous Waste Sites	Number of Sites
Sites of greatest concern within right-of-way	1
Additional sites of concern within right-of-way	1
Sites of secondary concern	9

*Sites of Greatest Concern*

MDK Construction (UST, U003151344). This UST site is located east of the Interstate 15 (I-15) interchange at 2100 North. One diesel UST and one gasoline UST were removed from the ground in 1988. The DERR database did not indicate that these tanks had leaked.

Table 18.4-6. Potential Hazardous Waste Site Impacts under the 2100 North Freeway Alternative

Site Name	Unique ID	Database	Approximate Address
<i>Sites of Greatest Concern within Right-of-Way</i>			
MDK Construction Inc.	U003151344	UST	1995 North 900 West
<i>Sites of Secondary Concern outside Right-of-Way</i>			
Saratoga West Crops Project Canal Pump	U003151342	LUST	0.5 mile west of Redwood Rd. along 8400 North
Precision Rock Products	1004605192 1005773947	FINDS FINDS	11350 N. Frontage Rd.
Metro West Ready Mix	1005792813	FINDS	11642 N. Frontage Rd.
Cedarapids E400 Asphalt Plant	1005795808	FINDS	9210 West 1750 North
Utah Valley Turf Farms	1005792880	FINDS	1075 W. State St.
UDOT Station 623	U003151350	LUST	2760 N. Frontage Rd. (1600 W. State St.)
Lee's Roundup Chevron	U003033466	UST	1531 N. State St.
Brick Manufacturing—Lehi Plant	1005773947	FINDS	2200 North 1100 West
Jordan Valley Water Treatment	U003149453	LUST	15305 South 3200 West
<i>Additional Sites of Concern within Right-of-Way</i>			
Lehi Cogeneration	1000657200	RCRIS-SQG	1697 West 2100 North

2100 North Freeway Alternative with Tolling Option

Under the 2100 North Freeway Alternative with Tolling Option, the overall facility design would not change compared to the non-tolled alternative, so impacts to potentially hazardous sites would be the same as those for the 2100 North Freeway Alternative.



18.4.4.3 Arterials Alternative

As described in Chapter 2, Alternatives, this alternative would consist of a series of arterial roadways throughout northern Utah County. The combination of arterials includes a freeway segment from the Utah County line to SR 73 and arterial roadways at Porter Rockwell Boulevard, 2100 North, and 1900 South.

As shown in Table 18.4-7 below and Figure 18-8, Potentially Hazardous Sites – Arterials Alternative, the Arterials Alternative would affect three sites of greatest concern. Three additional potentially hazardous sites are within the proposed right-of-way for this alternative. Fourteen sites of secondary concern are located near this alternative and could affect construction if contamination is present.

Arterials Alternative Impacts	
Potentially Hazardous Waste Sites	Number of Sites
Sites of greatest concern within right-of-way	3
Additional sites of concern within right-of-way	3
Sites of secondary concern	14

Sites of Greatest Concern

The Arterials Alternative would affect the following sites of greatest concern within the right-of-way:

- Timpanogos Special Service District
- MDK Construction, Inc.
- Utah State Prison North Gate

Impacts for the Timpanogos Special Service District site under this alternative would be the same as those described in Section 18.4.4.1, Southern Freeway Alternative. Impacts for the MDK Construction property under this alternative would be the same as those described in Section 18.4.4.2, 2100 North Freeway Alternative. The additional site of greatest concern for the Arterials Alternative is discussed below.

Utah State Prison North Gate (LUST, U003149465). This LUST is located at the Utah State Prison at 14425 S. Bitterbrush Lane in Draper (Salt Lake County). The location of the leaking diesel storage tank on the property is unknown. The LUST occurrence was closed in October 1999. Several other USTs are located on this property and are currently in use. If contamination is present in soil or groundwater, it could be encountered during construction.

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Table 18.4-7. Potential Hazardous Waste Site Impacts under the Arterials Alternative

Site Name	Unique ID	Database	Approximate Address
<i>Sites of Greatest Concern within Right-of-Way</i>			
Utah State Prison North Gate	U003149465	LUST	14425 S. Bitterbrush Lane
Timpanogos Special Service Dist.	U003033392	LUST	6400 North 5050 West
MDK Construction Inc.	U003151344	UST	1995 North 900 West
<i>Sites of Secondary Concern outside Right-of-Way</i>			
Brick Manufacturing-Lehi Plant	1005773947	FINDS	2200 North 1100 West
Utah Valley Turf Farms	1005792880	FINDS	1075 W. State St.
Cedarapids E400 Asphalt Plant	1005795808	FINDS	9210 West 1750 North
UDOT Station 623	U003151350	LUST	2760 N. Frontage Rd. (1600 W. State St.)
Metro West Ready Mix	1005792813	FINDS	11642 N. Frontage Rd.
Bluffdale Prison Motor Pool	1005797006	UST	14400 Pony Express Rd.
Jordan Valley Water Treatment	U003149453	LUST	15305 South 3200 West
Precision Rock Products	1004605192 1005773947	FINDS FINDS	11350 N. Frontage Rd.
Halls	1005794560	FINDS	800 West 14600 South
Lee's Roundup Chevron	U003033466	UST	1531 N. State St.
Pelican Point Aggregate Plant	1005795849	FINDS	2206 Redwood Rd.
Saratoga West Crops Project Canal Pump	U003151342	LUST	0.5 mile west of Redwood Rd. along 8400 North
Geneva Rock Products (Gravel Pit)	U000812844	LUST	15800 South 675 West
Geneva Rock Point of the Mountain (Fueling Facility)	U003379085	UST	15547 South 300 East
<i>Additional Sites of Concern within Right-of-Way</i>			
Pleasant Grove Timp Farm	1005796460	FINDS	5750 West 6400 North
Walter Strate	1005796380	FINDS	6384 North 5300 West
Lehi Cogeneration	1000657200	RCRIS-SQG	1697 West 2100 North

Arterials Alternative with Tolling Option

Under the Arterials Alternative with Tolling Option, the overall facility design would not change compared to the non-tolled alternative, so impacts to potentially hazardous sites would be the same as those for the Arterials Alternative.

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18.4.5 Mitigation Measures

During the final design phase of the project, UDOT will coordinate with DERR (a division of the Utah Department of Environmental Quality) and/or EPA, the construction contractor, and the appropriate property owners. This coordination will involve determining the status of the sites of concern at the time of construction and identifying the nature and extent of remaining contamination (if any) to minimize the risk to all parties involved. The potential to affect newly discovered sites will be identified by reviewing DERR records. UDOT will determine the need for phase I environmental site assessments at suspect properties during the final design phase to further evaluate the potential for encountering hazardous materials within the right-of-way for any of the action alternatives. If the assessments determine that contamination is still present, the remedial measures will be determined based on the nature and extent of contamination through coordination with DERR and/or EPA.

Previously unidentified sites or contamination (such as buried drums, fuel USTs, or solvent USTs) could be encountered during construction. In such a case, all work will stop in the area of the contamination according to UDOT Standard Specifications, and the contractor will consult with UDOT and DERR to determine the appropriate remedial measures. Hazardous wastes will be handled according to UDOT Standard Specifications and the requirements and regulations of the Utah Department of Environmental Quality and EPA.

18.4.6 Cumulative Impacts

Cumulative impacts were analyzed for local and regionally important issues (farmlands, air quality, water quality, and ecosystems) as developed with resource agencies and the public during scoping. See Chapter 25, Cumulative Impacts, for a more detailed discussion of cumulative impacts.

18.4.7 Summary of Impacts

Table 18.4-8 summarizes the impacts from each combination of alternatives and options in Salt Lake County and Utah County.

Table 18.4-8. Summary of Hazardous Waste Site Impacts

Alternative ^a	Impacts ^b			Total
	Sites of Greatest Concern within Right-of-Way	Additional Sites of Concern within Right-of-Way	Sites of Secondary Concern outside Right-of-Way	
5800 West Freeway / 5600 West Transit / Southern Freeway				
Dedicated Transit	24	27	23	74
Mixed Transit	20	27	27	74
5800 West Freeway / 5600 West Transit / 2100 North Freeway				
Dedicated Transit	23	26	30	79
Mixed Transit	19	26	34	79
5800 West Freeway / 5600 West Transit / Arterials				
Dedicated Transit	25	28	35	88
Mixed Transit	21	28	39	88
7200 West Freeway / 5600 West Transit / Southern Freeway				
Dedicated Transit	27	26	22	75
Mixed Transit	23	26	26	75
7200 West Freeway / 5600 West Transit / 2100 North Freeway				
Dedicated Transit	26	25	29	80
Mixed Transit	22	25	33	80
7200 West Freeway / 5600 West Transit / Arterials				
Dedicated Transit	28	27	34	89
Mixed Transit	24	27	38	89

^a Dedicated Transit = Dedicated Right-of-Way Transit Option; Mixed Transit = Mixed-Traffic Transit Option

^b Impacts summarized in this table are totals for both Salt Lake County and Utah County alternatives. Total impact includes transit options.

18.5 References

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